REMARKS

On page 2 of the Action, claims 2, 3, 10 and 11 were rejected under 35 U.S.C. 112, second paragraph, and it was requested to amend the disclosure to include the material. In this respect, copies of the articles showing JIS Z 8730 and JIS Z 8722 referred to by JIS Z 8730 have been filed herewith. The articles consist of the same materials incorporated by reference in the referencing application.

On page 3 of the Action, claims 1-6 were rejected by JP 48-29528, and on page 4 of the Action, claims 1-8 were rejected by JP 60-228460. On page 4 of the Action, claims 10-21 were rejected under 35 U.S.C. 103(a) as being unpatentable over Schmid et al. in view of Nishihara et al. In view of the rejections, claims 9-21 have been cancelled.

In a method of manufacturing pigments in claim 1, a dispersion of pigment particles is prepared, and a silicic acid solution is added to the dispersion of the pigment particles to have silicic acid polymer deposited on surfaces of the pigment particles. Thus, the surfaces of the pigment particles are coated homogeneously with the silicic acid polymer having refractive index of at most 1.8 to thereby reduce a change of color of the pigment particles coated with the silicic acid polymer when caprylic triglyceride or water is added.

As explained before, the silicic acid solution used in the invention is different from silicic acid and silicate. As shown on page 180, lines 11-15 of "THE CHEMISTRY OF SILICA" attached in the amendment filed on September 25, 2003, silicic acid solution is formed from $No_2SiO_4 \cdot 9H_2O$ with ion-exchange resin. The solution is stable until the concentration of SiO_2 is up to 5-6 wt.% in room temperature. The "solution of monomer" in the article means silicic acid solution as stated on page 177, line 12 as "monomeric silicic acid, $Si(OH)_4$".

The silicic acid solution has a characteristic such that if the silicic acid is heated above 50 °C, the silicic acid becomes gel within several hours. The silicic acid solution is entirely different from silicic acid and silicate.

In JP '528, pigments are coated with silicate by heating silicic acid or silicate in water to increase solubility thereof, and then cooling the solution to deposit or form layers on the pigments. Although solubility of silicic acid is very low in water, as the temperature of the solution is increased, solubility of silica in the solution is increased, such as 0.05% at 200 °C. Thus, when the solution is cooled, silica is deposited on the pigments. In the Examples of JP '528, glass and other materials containing silica is heated in water or alkaline water, and is cooled.

In order to clarify the above explanation, a translation at column 2, lines 1-28 of JP '528 is shown below:

"Next, the results of the study are explained. Generally, silicic acid and specific silicate are insoluble materials which are very low in solubility in water. However, in the compounds which are insoluble at the room temperature, they show relatively good solubility to hot water above 100 °C. For example, SiO_2 is soluble about 0.005 % for hot water of about 200 °C (G. C. Kennedy: Econ. Geol., 45, 7, 369 (1950)), and in weak alkaline solution, the solubility is further increased (R. A. Laudise and A. A. Ballman: J. Am. Chem. Sec., 80,2655 (1958)). These phenomena may be understood from the facts that when glass is processed in hot water above 100 °C, the glass partially dissolves to loose transparency or to become a sponge state. The present method of the invention utilizes the increase of solubility of silicic acid and silicate in hot water, and a method of coating the outer surfaces of the pigments is invented. Namely, pigments are dispersed in water or weak alkaline solution, to which a suitable amount of silica sands

with the diameter of 2-3 mm is added. The materials are subjected to water-heat treatment in an autoclave at 150-200 °C. As a result, the solubility is increased and the added siliceous sands dissolve in hot water as the temperature is raised. The solution is cooled after the temperature reaches predetermined temperature. By the water-heat treatment, the following solubility-separating reaction occurs. Silicate dissolved in high temperature hot water is in a saturated condition in the highest temperature, but the solubility decreases along with cooling, so that extra silicic acid is gradually separated. This separated silicic acid is deposited on the outer surfaces of the pigments as layers." (Since the above translation has been made by the undersigned agent, verification thereof is omitted.)

Namely, in JP '528, silicic acid is dissolved in high temperature water, and is cooled to be deposited on the pigments by using solubility of silicic acid according to the temperature of the solution.

In claim 1 of the invention, as explained above, silicic acid solution is used to form the silicic acid polymer on the pigment particles. It is not required to heat and cool the solution to deposit the material on the particles. In JP '528, the solubility of silicic acid in water is different by temperature, and this difference in solubility is utilized to form the coating. Thus, the method in forming the layer on the particles in claim 1 of the invention is entirely different from that of JP '528.

In JP '406, silica coatings are formed on the particles, wherein inorganic silica compounds and particles may be mixed and pulverized to form the coated particles by mechanical and chemical reactions. The particles may be dispersed in a solution containing silicic acid with sodium or potassium, to which acid is added thereto to neutralize. Organic silicic compound may be added into alcohol, to which particles are added. In claim 1 of the

invention, silicic acid solution is used to form the silicic acid polymer on the pigment particles. However, JP '406 does not use the silicic acid solution to deposit the silica layer on the particles. Thus, the method in claim 1 of the invention is not disclosed or suggested in JP '406.

It is to be understood that the silicic acid solution used in the present invention is different from silicic acid and silicate. The formation of silicic acid polymer on the pigments of the invention is not disclosed or suggested in the cited references.

Reconsideration and allowance are earnestly solicited.

Respectfully Submitted,

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